AMENDED IN ASSEMBLY APRIL 21, 2014

CALIFORNIA LEGISLATURE—2013-14 REGULAR SESSION

ASSEMBLY BILL

No. 2581

Introduced by Assembly Member Bradford

February 21, 2014

An act to amend <u>Section</u> *Sections 25402 and 25402.1* of the Public Resources Code, relating to energy.

LEGISLATIVE COUNSEL'S DIGEST

AB 2581, as amended, Bradford. Energy: *appliance standards:* public domain computer program.

(1) Existing law requires the State Energy Resources Conservation and Development Commission to prescribe, by regulation, standards for minimum levels of operating efficiency, and authorizes the commission to prescribe other cost-effective measures, to promote the use of energy and water-efficient appliances whose use requires a significant amount of energy or water on a statewide basis.

This bill would instead authorize the commission to prescribe or adopt other cost-effective measures, including voluntary agreements. The bill would authorize the commission to repeal a standard of minimum levels operating efficiency for an appliance if it finds that the standard is duplicative or inconsistent with federal or state law. The bill would require the commission to rely on the most current data possible and, whenever feasible, to rely on data no older than one year prior to the commencement of a rulemaking proceeding to consider adoption or amendment of a standard for an appliance.

Existing

(2) Existing law requires the California Energy Commission commission to prescribe, by regulation, lighting, insulation climate

AB 2581 — 2 —

control system, and other building design and construction standards that increase the efficiency in the use of energy and water for new residential and new nonresidential buildings. Existing law also requires the commission to prescribe, by regulation, energy and water conservation design standards for new residential and new nonresidential buildings. In order to implement these requirements, existing law requires the commission to develop a public domain computer program that enables contractors, builders, architects, engineers, and government officials to estimate energy consumed by residential and nonresidential buildings and requires the commission to establish a formal process for certification of compliance options for new products, materials, and calculation methods, as prescribed.

This bill would require the commission to ensure that approve and make publicly available, not less than 6 months prior to the effective date of adopted or updated efficiency standards, the public domain computer program and the compliance options produce an estimate of energy consumption for residential and nonresidential buildings that has an accuracy within 5% of actual energy consumption for residential and nonresidential buildings. program. The bill would require the commission, before approving the public domain computer program, to perform preliminary tests of the public domain computer program using common examples of residential and nonresidential buildings and building systems to ensure the usability of the program by architects, builders, contractors, and local code enforcement personnel. The bill would require the commission to make the results of those preliminary tests publicly available.

For existing single-family residential dwellings and multifamily residential dwellings with up to 4 units, the bill would require the commission to ensure that energy assessment tools used by the commission are routinely adjusted to improve modeling accuracy and to ensure that consumers receive a notice with the output of the energy assessment tools explaining the assumptions used in the energy assessment tools and how they may differ from actual usage patterns.

Vote: majority. Appropriation: no. Fiscal committee: yes. State-mandated local program: no.

The people of the State of California do enact as follows:

1 SECTION 1. Section 25402 of the Public Resources Code is 2 amended to read:

-3- AB 2581

25402. The commission shall, after one or more public hearings, do all of the following, in order to reduce the wasteful, uneconomic, inefficient, or unnecessary consumption of energy, including the energy associated with the use of water:

- (a) (1) Prescribe, by regulation, lighting, insulation climate control system, and other building design and construction standards that increase the efficiency in the use of energy and water for new residential and new nonresidential buildings. The commission shall periodically update the standards and adopt any revision that, in its judgment, it deems necessary. Six months after the commission certifies an energy conservation manual pursuant to subdivision (c) of Section 25402.1,—no a city, county, city and county, or state agency shall not issue a permit for—any a building unless the building satisfies the standards prescribed by the commission pursuant to this subdivision or subdivision (b) that are in effect on the date an application for a building permit is filed. Water efficiency standards adopted pursuant to this subdivision shall be demonstrated by the commission to be necessary to save energy.
- (2) Prior to adopting a water efficiency standard for residential buildings, the Department of Housing and Community Development and the commission shall issue a joint finding whether the standard (A) is equivalent or superior in performance, safety, and for the protection of life, health, and general welfare to standards in Title 24 of the California Code of Regulations and (B) does not unreasonably or unnecessarily impact the ability of Californians to purchase or rent affordable housing, as determined by taking account of the overall benefit derived from water efficiency standards. Nothing in this This subdivision in does not in any way-reduces reduce the authority of the Department of Housing and Community Development to adopt standards and regulations pursuant to Part 1.5 (commencing with Section 17910) of Division 13 of the Health and Safety Code.
- (3) Water efficiency standards and water conservation design standards adopted pursuant to this subdivision and subdivision (b) shall be consistent with the legislative findings of this division to ensure and maintain a reliable supply of electrical energy and be equivalent to or superior to the performance, safety, and protection of life, health, and general welfare standards contained in Title 24 of the California Code of Regulations. The commission shall

AB 2581 —4—

1

2

3

4

5

6

7

8

10

11

12

13

14

15

16

17

18

19

20

21

22

23

24

25

26

27

28

29

30

31

32

33 34

35

36

37

38

39

40

consult with the members of the coordinating council as established in Section 18926 of the Health and Safety Code in the development of these standards.

- (b) (1) Prescribe, by regulation, energy and water conservation design standards for new residential and new nonresidential buildings. The standards shall be performance standards and shall be promulgated in terms of energy consumption per gross square foot of floorspace, but may also include devices, systems, and techniques required to conserve energy and water. The commission shall periodically review the standards and adopt any revision that, in its judgment, it deems necessary. A building that satisfies the standards prescribed pursuant to this subdivision need not comply with the standards prescribed pursuant to subdivision (a). Water conservation design standards adopted pursuant to this subdivision shall be demonstrated by the commission to be necessary to save energy. Prior to adopting a water conservation design standard for residential buildings, the Department of Housing and Community Development and the commission shall issue a joint finding whether the standard (A) is equivalent or superior in performance, safety, and for the protection of life, health, and general welfare to standards in the California Building Standards Code and (B) does not unreasonably or unnecessarily impact the ability of Californians to purchase or rent affordable housing, as determined by taking account of the overall benefit derived from the water conservation design standards. Nothing in this subdivision in any way reduces the authority of the Department of Housing and Community Development to adopt standards and regulations pursuant to Part 1.5 (commencing with Section 17910) of Division 13 of the Health and Safety Code.
- (2) In order to increase public participation and improve the efficacy of the standards adopted pursuant to subdivisions (a) and (b), the commission shall, prior to publication of the notice of proposed action required by Section 18935 of the Health and Safety Code, involve parties who would be subject to the proposed regulations in public meetings regarding the proposed regulations. All potential affected parties shall be provided advance notice of these meetings and given an opportunity to provide written or oral comments. During these public meetings, the commission shall receive and take into consideration input from all parties concerning the parties' design recommendations, cost

5 AB 2581

considerations, and other factors that would affect consumers and California businesses of the proposed standard. The commission shall take into consideration prior to the start of the notice of proposed action any input provided during these public meetings.

- (3) The standards adopted or revised pursuant to subdivisions (a) and (b) shall be cost-effective when taken in their entirety and when amortized over the economic life of the structure compared with historic practice. When determining cost-effectiveness, the commission shall consider the value of the water or energy saved, impact on product efficacy for the consumer, and the life cycle cost of complying with the standard. The commission shall consider other relevant factors, as required by Sections 18930 and 18935 of the Health and Safety Code, including, but not limited to, the impact on housing costs, the total statewide costs and benefits of the standard over its lifetime, economic impact on California businesses, and alternative approaches and their associated costs.
- (c) (1) (A) Prescribe, by regulation, standards for minimum levels of operating efficiency, based on a reasonable use pattern, and may prescribe or adopt other cost-effective measures, including incentive programs, fleet averaging, energy and water consumption labeling not preempted by federal labeling law, and consumer education programs, and voluntary agreements to promote the use of energy and water efficient appliances whose use, as determined by the commission, requires a significant amount of energy or water on a statewide basis. The minimum levels of operating efficiency shall be based on feasible and attainable efficiencies or feasible improved efficiencies that will reduce the energy or water consumption growth rates. The standards shall become effective no sooner than one year after the date of adoption or revision. No A new appliance manufactured on or after the effective date of the standards may shall not be sold or offered for sale in the state, unless it is certified by the manufacturer thereof to be in compliance with the standards. The standards shall be drawn so that they do not result in any added total costs for consumers over the designed life of the appliances concerned.

In

(B) In order to increase public participation and improve the efficacy of the standards adopted pursuant to this subdivision, the commission shall, prior to publication of the notice of proposed action required by Section 18935 of the Health and Safety Code,

-6-**AB 2581**

involve parties who would be subject to the proposed regulations

- in public meetings regarding the proposed regulations. All potential
- 3 affected parties shall be provided advance notice of these meetings
- 4 and given an opportunity to provide written or oral comments. 5 During these public meetings, the commission shall receive and
- 6 take into consideration input from all parties concerning the parties'
- 7 design recommendations, cost considerations, and other factors
- 8 that would affect consumers and California businesses of the
- proposed standard. The commission shall take into consideration

10 prior to the start of the notice of proposed action any input provided 11

during these public meetings.

The

12

13

14

15

16 17

18

19

20

21

22

23

24

25

26

27

28

29

30

31

32

33

34

35

36

37

38 39

- (C) The standards adopted or revised pursuant to this subdivision shall not result in any added total costs for consumers over the designed life of the appliances concerned. When determining cost-effectiveness, the commission shall consider the value of the water or energy saved, impact on product efficacy for the consumer, and the life cycle cost to the consumer of complying with the standard. The commission shall consider other relevant factors, as required by Sections 11346.5 and 11357 of the Government Code, including, but not limited to, the impact on housing costs, the total statewide costs and benefits of the standard over its lifetime, economic impact on California businesses, and alternative approaches and their associated costs.
- (2) No-A new appliance, except for any plumbing fitting, regulated under paragraph (1), that is manufactured on or after July 1, 1984, may shall not be sold, or offered for sale, in the state, unless the date of the manufacture is permanently displayed in an accessible place on that appliance.
- (3) During the period of five years after the commission has adopted a standard for a particular appliance under paragraph (1), no an increase or decrease in the minimum level of operating efficiency required by the standard for that appliance shall not become effective, unless the commission adopts other cost-effective measures for that appliance.
- (4) Neither the commission nor any other state agency shall take any action to decrease any standard adopted under this subdivision on or before June 30, 1985, prescribing minimum levels of operating efficiency or other energy conservation measures for any appliance, unless the commission finds by a

-7- AB 2581

four-fifths vote that a decrease is of benefit to ratepayers, and that 1 2 there is significant evidence of changed circumstances. Before 3 January 1, 1986, the commission shall not take any action to 4 increase a standard prescribing minimum levels of operating 5 efficiency for any appliance or adopt a new standard under 6 paragraph (1). Before January 1, 1986, any appliance manufacturer 7 doing business in this state shall provide directly, or through an 8 appropriate trade or industry association, information, as specified by the commission after consultation with manufacturers doing 10 business in the state and appropriate trade or industry associations 11 on sales of appliances so that the commission may study the effects 12 of regulations on those sales. These informational requirements 13 shall remain in effect until the information is received. The trade 14 or industry association may submit sales information in an 15 aggregated form in a manner that allows the commission to carry 16 out the purposes of the study. The commission shall treat any sales 17 information of an individual manufacturer as confidential and that 18 information shall not be a public record. The commission shall not 19 request any information that cannot be reasonably produced in the 20 exercise of due diligence by the manufacturer. At least one year 21 prior to the adoption or amendment of a standard for an appliance, 22 the commission shall notify the Legislature of its intent, and the 23 justification to adopt or amend a standard for the appliance. The 24 commission shall rely on the most current data available and, 25 whenever feasible, shall rely on data no older than one year prior 26 to the commencement of a rulemaking proceeding to consider 27 adoption or amendment of a standard for an appliance pursuant 28 to this subdivision. Notwithstanding paragraph (3) and this 29 paragraph, the commission may do any of the following: 30

(A) Increase the minimum level of operating efficiency in an existing standard up to the level of the National Voluntary Consensus Standards 90, adopted by the American Society of Heating, Refrigeration, and Air Conditioning Engineers or, for appliances not covered by that standard, up to the level established in a similar nationwide consensus standard.

31

32

33

34

35

36

37

38

39

- (B) Change the measure or rating of efficiency of any standard, if the minimum level of operating efficiency remains substantially the same.
- (C) Adjust the minimum level of operating efficiency in an existing standard in order to reflect changes in test procedures that

AB 2581 —8—

the standards require manufacturers to use in certifying compliance,
if the minimum level of operating efficiency remains substantially
the same.

- (D) Readopt a standard preempted, enjoined, or otherwise found legally defective by an administrative agency or a lower court, if final legal action determines that the standard is valid and if the standard that is readopted is not more stringent than the standard that was found to be defective or preempted.
- (E) Repeal a standard for a particular appliance adopted under paragraph (1) if it finds that the standard is duplicative or inconsistent with federal or state law.

12 (E)

- (F) Adopt or amend any existing or new standard at any level of operating efficiency, if the Governor has declared an energy emergency as described in Section 8558 of the Government Code.
- (5) Notwithstanding paragraph (4), the commission may adopt standards pursuant to Commission Order No. 84-0111-1, on or before June 30, 1985.
- (d) (1) Recommend minimum standards of efficiency for the operation of—any a new facility at a particular site that are technically and economically feasible. No A site and related facility shall not be certified pursuant to Chapter 6 (commencing with Section 25500), unless the applicant certifies that standards recommended by the commission have been considered, which certification shall include a statement specifying the extent to which conformance with the recommended standards will be achieved.

Whenever

- (2) Whenever this section and Chapter 11.5 (commencing with Section 19878) of Part 3 of Division 13 of the Health and Safety Code are in conflict, the commission shall be governed by that chapter of the Health and Safety Code to the extent of the conflict.
 - (e) The commission shall do all of the following:
- (1) Not later than January 1, 2004, amend any regulations in effect on January 1, 2003, pertaining to the energy efficiency standards for residential clothes washers to require that residential clothes washers manufactured on or after January 1, 2007, be at least as water efficient as commercial clothes washers.
- 39 (2) Not later than April 1, 2004, petition the federal Department 40 of Energy for an exemption from any relevant federal regulations

-9- AB 2581

governing energy efficiency standards that are applicable to residential clothes washers.

(3) Not later than January 1, 2005, report to the Legislature on its progress with respect to the requirements of paragraphs (1) and (2).

SECTION 1.

2

3 4

5

6

7

8

9

10

11

12

13

14

15

16 17

18

19

20

21

22

23

24

25

26

27

28

29

30

31

32

33

34

35

36

37

38

39

- SEC. 2. Section 25402.1 of the Public Resources Code is amended to read:
- 25402.1. (a)—In order to implement the requirements of subdivisions (a) and (b) of Section 25402, the commission shall do all of the following *shall apply*:

(1) Develop

(a) The commission shall develop a public domain computer program that will enable contractors, builders, architects, engineers, and government officials to estimate the energy consumed by residential and nonresidential buildings. The commission may charge a fee for the use of the program, which shall be based upon the actual cost of the program, including any computer costs.

(2) Establish

(b) The commission shall establish a formal process for certification of compliance options for new products, materials, and calculation methods that provides for adequate technical and public review to ensure accurate, equitable, and timely evaluation of certification applications. Proponents filing applications for new products, materials, and calculation methods shall provide all information needed to evaluate the application that is required by the commission. The commission shall publish annually the results of its certification decisions and instructions to users and local building officials concerning requirements for showing compliance with the building standards for new products, materials, or calculation methods. The commission may charge and collect a reasonable fee from applicants to cover the costs under this paragraph. subdivision. Any funds received by the commission for purposes of this subdivision shall be deposited in the Energy Resources Programs Account and, notwithstanding Section 13340 of the Government Code, are continuously appropriated to the commission for the purposes of this subdivision. Any unencumbered portion of funds collected as a fee for an application remaining in the Energy Resources Programs Account after

— 10 — AB 2581

completion of the certification process for that application shall 2 be returned to the applicant within a reasonable period of time. 3

(3) Include

4

5

7

8

10

11

12

13

14

15

16 17

18

19

20 21

22

23

24

25

26

27

28

29

30

31

32

33

34

35

36

37

38

39

40

(c) The commission shall include a prescriptive method of complying with the standards, including design aids such as a manual, sample calculations, and model structural designs.

(4) Conduct

- (d) The commission shall conduct a pilot project of field testing of actual residential buildings to calibrate and identify potential needed changes in the modeling assumptions to increase the accuracy of the public domain computer program specified in paragraph (1) subdivision (a) and to evaluate the impacts of the standards, including, but not limited to, the energy savings, cost effectiveness, and the effects on indoor air quality. The pilot project shall be conducted pursuant to a contract entered into by the commission. The commission shall consult with the participants designated pursuant to Section 9202 of the Public Utilities Code, as that section read on December 31, 2003, to seek funding and support for field monitoring in each public utility service territory, with the University of California to take advantage of its extensive building monitoring expertise, and with the California Building Industry Association to coordinate the involvement of builders and developers throughout the state. The pilot project shall include periodic public workshops to develop plans and review progress. The commission shall prepare and submit a report to the Legislature on progress and initial findings not later than December 31, 1988, and a final report on the results of the pilot project on residential buildings not later than June 30, 1990. The report shall include recommendations regarding the need and feasibility of conducting further monitoring of actual residential and nonresidential buildings. The report shall also identify any revisions to the public domain computer program and energy conservation standards if the pilot project determines that revisions are appropriate.
- (5) Ensure that the public domain computer program developed pursuant to paragraph (1) and compliance options required pursuant to paragraph (2) produce an estimate of energy consumption for residential and nonresidential buildings that has an accuracy within 5 percent of actual energy consumption for residential and nonresidential buildings.
- (6) Certify,

—11— AB 2581

(e) The commission shall certify, not later than 180 days after approval of the standards by the State Building Standards Commission, an energy conservation manual for use by designers, builders, and contractors of residential and nonresidential buildings. The manual shall be furnished upon request at a price sufficient to cover the costs of production and shall be distributed at no cost to all affected local agencies. The manual shall contain, but not be limited to, the following:

(A)

(1) The standards for energy conservation established by the commission.

12 (B)

(2) Forms, charts, tables, and other data to assist designers and builders in meeting the standards.

15 (C

(3) Design suggestions for meeting or exceeding the standards.

17 (D)

(4) Any other information which the commission finds will assist persons in conforming to the standards.

(E)

(5) Instructions for use of the computer program for calculating energy consumption in residential and nonresidential buildings.

(F)

- (6) The prescriptive method for use as an alternative to the computer program.
- (f) The commission shall approve and make publicly available, not less than six months prior to the effective date of adopted or updated standards, the public domain computer program developed pursuant to subdivision (a). Before approving the public domain computer program, the commission shall do both of the following:
- (1) Perform preliminary tests of the public domain computer program using common examples of residential and nonresidential buildings and building systems to ensure the usability of the public domain computer program by architects, builders, contractors, and local code enforcement personnel.
 - (2) Make the results of the preliminary tests publicly available.
- (g) For existing single-family residential dwellings and multifamily residential dwellings with up to four units, the commission shall do both of the following:

AB 2581 — 12 —

(1) Ensure energy assessment tools used by the commission are routinely adjusted to improve modeling accuracy.

(2) Ensure that consumers receive a notice with the output of the energy assessment tools explaining the assumptions used in the energy assessment tools and how they may differ from actual usage patterns.

(7) Establish

(h) The commission shall establish a continuing program of technical assistance to local building departments in the enforcement of subdivisions (a) and (b) of Section 25402 and this section. The program shall include the training of local officials in building technology and enforcement procedures related to energy conservation, and the development of complementary training programs conducted by local governments, educational institutions, and other public or private entities. The technical assistance program shall include the preparation and publication of forms and procedures for local building departments in performing the review of building plans and specifications. The commission shall provide, on a contract basis, a review of building plans and specifications submitted by a local building department, and shall adopt a schedule of fees sufficient to repay the cost of those services.

(b)

- (i) Subdivisions (a) and (b) of Section 25402 and this section, and the rules and regulations of the commission adopted pursuant to those provisions, shall be enforced by the building department of every city, county, or city and county.
- (1) A building permit for a residential or nonresidential building shall not be issued by a local building department, unless a review by the building department of the plans for the proposed residential or nonresidential building contains detailed energy system specifications and confirms that the building satisfies the minimum standards established pursuant to subdivision (a) or (b) of Section 25402 and this section applicable to the building.
- (2) Where there is no local building department, the commission shall enforce subdivisions (a) and (b) of Section 25402 and this section
- (3) If a local building department fails to enforce subdivisions (a) and (b) of Section 25402 and this section or any other provision of this chapter or standard adopted pursuant thereto, the

-13- AB 2581

commission may provide enforcement after furnishing 10 days' written notice to the local building department.

- (4) A city, county, or city and county may, by ordinance or resolution, prescribe a schedule of fees sufficient to pay the costs incurred in the enforcement of subdivisions (a) and (b) of Section 25402 and this section. The commission may establish a schedule of fees sufficient to pay the costs incurred by that enforcement.
- (5) The construction of a state building shall not commence until the Department of General Services or the state agency that otherwise has jurisdiction over the property reviews the plans for the proposed building and certifies that the plans satisfy the minimum standards established pursuant to Chapter 2.8 (commencing with Section 15814.30) of Part 10b of Division 3 of Title 2 of the Government Code, subdivision (a) or (b) of Section 25402, and this section that are applicable to the building.

(c)

- (j) Subdivisions (a) and (b) of Section 25402 and this section shall apply only to new residential and nonresidential buildings on which actual site preparation and construction have not commenced prior to the effective date of rules and regulations adopted pursuant to those sections that are applicable to those buildings. Those sections shall not prohibit either of the following:
- (1) The enforcement of state or local energy conservation or energy insulation standards, adopted prior to the effective date of rules and regulations adopted pursuant to subdivisions (a) and (b) of Section 25402 and this section with regard to residential and nonresidential buildings on which actual site preparation and construction have commenced prior to that date.
- (2) The enforcement of city or county energy conservation or energy insulation standards, whenever adopted, with regard to residential and nonresidential buildings on which actual site preparation and construction have not commenced prior to the effective date of rules and regulations adopted pursuant to subdivisions (a) and (b) of Section 25402 and this section, if the city or county files the basis of its determination that the standards are cost effective with the commission and the commission finds that the standards will require the diminution of energy consumption levels permitted by the rules and regulations adopted pursuant to those sections. If, after two or more years after the filing with the commission of the determination that those standards

AB 2581 —14—

1 are cost effective, there has been a substantial change in the factual 2 circumstances affecting the determination, upon application by 3 any interested party, the city or county shall update and file a new 4 basis of its determination that the standards are cost effective. The 5 determination that the standards are cost effective shall be adopted 6 by the governing body of the city or county at a public meeting. If, at the meeting on the matter, the governing body determines that the standards are no longer cost effective, the standards shall, as of that date, be unenforceable and no building permit or other 10 entitlement shall be denied based on the noncompliance with the 11 standards.

(d)

12

13

14

15

16 17

18

19

21

22

23

2425

26

27

28

29

30

31

32

(k) The commission may exempt from the requirements of this section and of any regulations adopted pursuant to this section any proposed building for which compliance would be impossible without substantial delays and increases in cost of construction, if the commission finds that substantial funds have been expended in good faith on planning, designing, architecture, or engineering prior to the date of adoption of the regulations.

20 (e)

(1) If a dispute arises between an applicant for a building permit, or the state pursuant to paragraph (5) of subdivision—(b), (i), and the building department regarding interpretation of Section 25402 or the regulations adopted pursuant thereto, either party may submit the dispute to the commission for resolution. The commission's determination of the matter shall be binding on the parties.

(f)

(*m*) Nothing in Section 25130, 25131, or 25402, or in this section prevents enforcement of any regulation adopted pursuant to this chapter, or Chapter 11.5 (commencing with Section 19878) of Part 3 of Division 13 of the Health and Safety Code as they existed prior to September 16, 1977.